



FEDERAL SECURITY AGENCY
U. S. PUBLIC HEALTH SERVICE
NATIONAL INSTITUTE OF HEALTH
BETHESDA 14, MARYLAND

IN REPLYING, ADDRESS THE
Experimental Biology
and Medicine Institute

April 2, 1948

Dr. Joshua Lederberg
Assistant Professor of Genetics
The University of Wisconsin
College of Agriculture
Madison 6, Wisconsin

Dear Dr. Lederberg:

In cleaning up my desk recently, I came across your letter which you so kindly sent to me some time ago, concerning reversion in E. coli, and I noticed your request in regard to mutants of strain #58, which I had apparently overlooked before.

As a matter of fact Howard Mason was mistaken in telling you that I had quite a few of Strain #58 mutants. The mutants I have produced in the past have been mutants of E. coli American Type Culture Collection #9723. However, recently we have accumulated quite a few mutants of Strain #58, and I have characterized two of these as requiring pyrimidines. These are very stable with reversion frequencies of less than 10^{-9} on horse meat infusion agar. I shall be glad to send these to you if you should care for them.

Among your remarks concerning reversion you mentioned that one reversion from lactose - negative to lactose - positive has been analyzed genetically and proven to be a reverse mutation. I am assuming this was not done in bacteria. I should like to have the reference to this work.

I am planning on attending the SAB meeting in Minneapolis from May 10 - 14, and will also probably be in Madison for a short time. It would be a pleasure to visit you at your convenience.

Sincerely yours,

Robert Guthrie, Ph.D.